CLAIMS

1. A composition for dyeing a keratinous fiber comprising:

a) at least one oxidation base or direct dye or a mixture thereof;

b) at least one compound of formula (I) :

$$R\text{-}N\text{-}(CH(R')CO_2X)_2 \quad (I)$$

wherein

- R represents a hydrogen atom or a $CH(CO_2X)\text{-}(CH_2)_2CO_2X$, $CH_2\text{-}CH_2\text{-}OH$; $CH(CH_3)\text{-}CO_2X$ or $(CH_2)_2\text{-}N(COR")\text{-}CH_2\text{-}CO_2X$ group;
- R" represents a linear or branched alkyl group containing from 1 to 30 carbon atoms or a cyclic group containing from 3 to 30 carbon atoms;
- R' represents either a CH_2CO_2X group when R is a hydrogen atom or a hydrogen atom when R is other than a hydrogen atom; and
- X represents a hydrogen atom or a monovalent or divalent cation chosen from an alkali metal, alkaline-earth metal, transition metal, organic amine or ammonium ion,

c) a suitable medium.

2. The composition of claim 1, wherein said compound of formula (I) is methylglycinediacetic acid, 2-hydroxyethyl-iminodiacetic acid, ethylenediamine-N-lauroyl-N,N',N'-triacetic acid, iminodisuccinic acid, N,N-dicarboxymethyl-L-glutamic acid or a corresponding salt thereof, or a mixture thereof.

3. The composition of claim 1, wherein said compound of formula (I) is methylglycinediacetic acid, ethylenediamine-N-lauroyl-N,N',N'-triacetic acid, N,N-dicarboxymethyl-L-glutamic acid or a corresponding salt thereof or a mixture thereof.

4. The composition of claim 1, wherein said compound of

formula (I) is methylglycinediacetic acid, optionally in a salt form.

5. The composition of claim 1, wherein the content of said compound of formula (I) is from 0.001% to 10% by weight relative to the total weight of the composition.

6. The composition of claim 5, wherein said content of said compound of formula (I) is from 0.001% to 5% by weight relative to the total weight of the composition.

7. The composition of claim 1, wherein said oxidation base is a para-phenylenediamine, bis(phenyl)alkylenediamine, para-aminophenol, ortho-aminophenol or heterocyclic base, ora salt thereof with an acid or with an alkaline agent, or a mixture thereof.

8. The composition of claim 1, wherein the content of said oxidation base is from 0.0005% to 12% by weight relative to the total weight of the composition.

9. The composition of claim 1, further comprising at least one coupler.

10. The composition of claim 9, wherein said coupler is meta-phenylenediamine, meta-aminophenol, meta-diphenol or heterocyclic coupler, or a salt thereof with an acid or with an alkaline agent or a mixture thereof.

11. The composition of claim 9, wherein the content of said coupler is from 0.0001% to 10% by weight relative to the total weight of the composition.

12. The composition of claim 1, wherein said direct dye is a nitrobenzene dye, azo dye, anthraquinone dye, naphthoquinone dye, benzoquinone dye, phenothiazine dye, indigoid dye, xanthene dye, phenanthridine dye, phthalocyanin dye or a dye derived from triarylmethane or a mixture thereof.

13. The composition of claim 1, wherein the content of said direct dye is from 0.0005% to 12% by weight relative to the total weight of the composition.

14. The composition of claim 1, wherein said suitable medium is an aqueous medium.

15. The composition of claim 14, wherein said aqueous medium comprises water and optionally at least one cosmetically acceptable organic solvent.

16. The composition of claim 15, wherein said cosmetically acceptable organic solvent is a linear or branched, saturated or unsaturated, monoalcohol or diol containing from 2 to 10 carbon atoms, an aromatic alcohol, glycol or glycol ether, diethylene glycol alkyl ether or a mixture thereof.

17. The composition of claim 14, wherein the content of said cosmetically acceptable organic solvent is from 0.5% to 20% by weight relative to the total weight of the composition.

18. The composition of claim 1, further comprising a conditioning polymer.

19. The composition of claim 18, wherein said conditioning polymer is a cationic or amphoteric conditioning polymer or a mixture thereof.

20. The composition of claim 18, wherein the content of said conditioning polymer is from 0.01% to 10% by weight relative to the total weight of the composition.

21. The composition of claim 1, further comprising at least one surfactant.

22. The composition of claim 21, wherein said at least one surfactant is nonionic, anionic, cationic, amphoteric or zwitterionic surfactant or a mixture thereof.

23. The composition of claim 21, wherein the content of said surfactant is from 0.01% to 40% by weight relative to the total weight of the composition.

24. The composition of claim 1, further comprising at least one amphiphilic polymer with a hydrophobic chain.

25. The composition of claim 24, wherein said amphiphilic polymer with said hydrophobic chain is a nonionic,

anionic, cationic or amphoteric polymer with a hydrophobic chain.

26. The composition of claim 24, wherein the content of said amphiphilic polymer with said hydrophobic chain is from 0.005% to 20% by weight relative to the total weight of the composition.

27. The composition as in claim 1, further comprising at least one thickener.

28. The composition of claim 27, wherein said thickener is a water-soluble thickening polymer not containing a hydrophobic chain.

29. The composition of claim 27, wherein the content of said thickener is from 0.05% to 20% by weight relative to the total weight of the composition.

30. The composition of claim 1, further comprising at least one acidifying or basifying agent.

31. The composition of claim 30, wherein the content of said acidifying or said basifying agent is from 0.01% to 30% by weight relative to the total weight of the composition.

32. The composition of claim 1, further comprising at least one material selected from the group consisting of a coupler, conditioning polymer, surfactant, amphiphilic polymer with a hydrophobic chain, thickener, acidifying agent and basifying agent.

33. The composition of claim 32, wherein said coupler is a meta-phenylenediamine, meta-aminophenol, meta-diphenol or heterocylic coupler or a salt thereof with an acid or with an alkaline agent, or a mixture thereof, and is provided with an amount of from 0.0001% to 10% by weight relative to the total weight of the composition.

34. The composition of claim 32, wherein said conditioning polymer is a cationic or amphoteric conditioning polymer or a mixture thereof, and is provided with an amount

of from 0.01% to 10% by weight relative to the total weight of the composition.

35. The composition of claim 32, wherein said surfactant is a nonionic, anionic, cationic, amphoteric or zwitterionic surfactant or a mixture thereof, and is provided with an amount of from 0.01% to 40% by weight relative to the total weight of the composition.

36. The composition of claim 32, wherein said amphiphilic polymer with a hydrophobic chain is a nonionic, anionic, cationic or amphoteric polymer with a hydrophobic chain, and is provided in an amount of from 0.005% to 20% by weight relative to the total weight of the composition.

37. The composition of claim 32, wherein said thickener is a water-soluble thickening polymer not containing a hydrophobic chain, and is provided in an amount of from 0.05% to 20% by weight relative to the total weight of the composition.

38. The composition of claim 32, wherein the content of said acidifying agent or said basifying agent is from 0.01% to 30% by weight relative to the total weight of the composition.

39. The composition as in claim 1 or 32, wherein said composition is in the form of liquid, cream, gel or paste.

40. A ready-to-use composition comprising:

a) the composition as in claim 1 or 32, and

b) at least one oxidizing composition comprising at least one oxidizing agent in a medium suitable for dyeing.

41. The ready-to-use composition of claim 40, wherein said oxidizing agent is hydrogen peroxide, urea peroxide, alkali metal bromate, persalt, peracids, and enzyme, or a mixture thereof.

42. The ready-to-use composition of claim 41, wherein said persalt is perborate, percarbonate or persulphate.

43. The ready-to-use composition of claim 41, wherein said enzyme is peroxidase, or two electron or four electron oxidoreductase.

44. The ready-to-use composition of claim 40, wherein the content of said oxidizing agent is from 0.1% to 30% by weight relative to the weight of the oxidizing composition.

45. A process for dyeing a keratinous fiber comprising:

a) mixing said composition as in claim 1 or 32 and optionally an oxidizing composition comprising at least one oxidizing agent in a medium suitable for dyeing;

b) applying said mixed composition to said keratinous fiber shortly after mixing;

c) leaving said mixed composition on said keratinous fiber for sufficient time to obtain a desired coloration;

d) rinsing said keratinous fiber to remove said mixed composition from said keratinous fiber;

e) optionally washing and rinsing said keratinous fiber; and

f) optionally drying said keratinous fiber.

46. A device for dyeing keratinous fiber comprising:

a) at least two compartments, wherein

- one of said at least two compartments comprises said composition as in claim 1 or 32, and
- another one of said at least two compartments comprises an oxidizing composition comprising at least one oxidizing agent in a medium that is suitable for dyeing.